Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION

Goldstripe darter

Etheostoma parvipinne

Common name • Goldstripe darter
Scientific name • *Etheostoma parvipinne*
State status • Endangered

Ecology

In southeastern Missouri, the goldstripe darter is found in springs and small, shallow spring-fed streams with closed canopies. This closed-canopy cover is important in helping to maintain cooler water temperatures and restrict algal growth. The goldstripe darter prefers long, shallow pools with a sandy substrate and detrital depositions where it feeds on small aquatic invertebrates. This species ranges in length from 2.3 to 3.2 inches. Spawning occurs in March and April but may extend into May. Eggs are attached singly to in-channel woody material, aquatic plants and plant roots above the substrate.

Reasons for Decline

Although it is likely that goldstripe darters have always been rare in Missouri, habitat alteration through excessive siltation, restriction of channel flow, water impoundment and removal of riparian vegetation have contributed to the decline of this fish. Agriculture and urban development have greatly contributed to the lowering of the water table and increased the influx of non-point source pollution. Continued poor management practices left unchecked will eventually lead to the extirpation of this species from Missouri.

Specific Recommendations

The goldstripe darter has specialized and exacting habitat requirements. Any projects that alter water depth or gradient should be avoided in springs and streams that contain habitat for this fish.

→ No work should be allowed below the high bank of the stream between March 1 and May 15.
→ Sheet piling for coffer dams for the construction of bridge piers may be placed after May 15, but should be removed prior to March 1 of the following year. Removal of coffer dams should be coordinated with appropriate Missouri Department of Conservation personnel.
→ Avoid crossing of streams; where crossing is unavoidable, temporary crossing that does not restrict flow is recommended.
→ Avoid removing or altering the riparian corridor near springs and along streams.
→ Erosion and sediment controls should be strictly implemented and monitored for the duration of the project.
→ Dams should not be constructed in those streams where this species occurs.
→ With regard to permanent road crossings, use of a bridge would be more appropriate than placement of a culvert due to the potential of migration restriction for this species.

General Recommendations

Refer to “Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.”

Information Contacts

For further information regarding regulations for development near springs or streams, contact:

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
608 E. Cherry Street, Room 200
Columbia, MO 65201
Telephone: 573/876-1911

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.